



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.             | CONFIRMATION NO.       |
|---|-------------|----------------------|---------------------------------|------------------------|
| 10/509,702  | 09/30/2004  | Enrico Bellineto     | IT20020005                      | 2168                   |
| 173 7590 05/30/2007<br>WHIRLPOOL PATENTS COMPANY - MD 0750<br>500 RENAISSANCE DRIVE - SUITE 102<br>ST. JOSEPH, MI 49085 |             |                      | EXAMINER<br>HECKERT, JASON MARK |                        |
|   |             |                      | ART UNIT<br>1746                | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>05/30/2007         | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/509,702             |  | BELLINETTO ET AL.   |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Jason Heckert          |  | 1746                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 9/30/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Drawings***

New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figure 3 is of poor quality and difficult to interpret because of the poor quality. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.

Art Unit: 1746

- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

1. The disclosure is objected to because of the following informalities: There are a variety of typographical errors in the specification, primarily due to a poor or direct translation of the foreign applicant.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 2 and 8 recite the limitation "predicted amount of free water". There is insufficient antecedent basis for this limitation in the claim. Please revise said claims.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1746

6. Claim 1, 4, 7 rejected under 35 U.S.C. 102(b) as being anticipated by Battistella. Battistella discloses that it is widely known to calculate load or soaking characteristics based on absorbency (col. 2 line 61-65). Specifically, Battistella discloses a washing machine wherein a predetermined amount of water is supplied to the washing machine. This value is stored in memory (col. 5 line 22-25). The clothes are then agitated so that they may absorb the water. The machine measures the amount of residual water and determines the amount of water absorbed (col. 2 line 54-60, col. 5 lines 41-45). At this point, a soaking characteristic is calculated and the mix of textiles, readable on load equivalent, is determined by comparing the known weight with a stored database of absorbency ratios. The washing machine has a control means 6 and based on the machine's ability to check the current water level (col. 3 line 7) a level sensor is inherent. Battistella discloses monitoring water levels over pre-determined time intervals (col. 4 lines 20 – 55). A pressure switch 3 detects the water levels. Therefore the free water can be calculated based on the value interpreted by the pressure switch, which provides the recorded water level measurement.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 2, 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Battistella in view of Cracraft. Battistella does disclose measuring water level over predetermined

time intervals, but does not disclose calculating the differences, or derivative. Cracraft discloses calculating the derivative to determine fill characteristics such as water absorbency and displacement (col. 9 lines 25-35). It would have been obvious, at the time of the invention to modify the method or apparatus of Battistella, which already monitors the correct information to calculate a derivative of water level and performs operations to calculate load equivalents based on absorbency, and calculate the derivative of the water level, as taught by Cracraft, to allow for the calculation of load characteristics over time, including future predictions, using Battistella's known method.

9. Claims 3, 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battistella in view of Wickremasinghe. Battistella does not include a step or means for alarming the user of irregular water levels. Wickremasinghe discloses including a low level sensor and alarm system capable of warning the user if water exceeds a certain height in order to prevent overflow. Furthermore alarms are well known in the art for alerting the user of abnormalities. It would have been obvious at the time of the invention to modify Battistella, and include an alarm system, to warn the user and prevent overfilling. Furthermore, the combination of Battistella, who includes a pressure-type water level sensor as well as a control unit, with Wickremasinghe, would be fully capable of alarming the user of low levels, high levels, and other irregular water level activity.

10. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Battistella in view of Civanelli et al. Battistella does not disclose distinct aspects of the spinning cycle. It is known in the art to have a spinning cycle following the wash stage,

Art Unit: 1746

specifically one that has at least two speed steps. Civanelli et al. disclose a spinning step that involves slow acceleration to an orbital speed in order to monitor balance. During this phase, more water is in the clothes due to the fact that it has not been spun at the higher rate yet. After balance is achieved, the drum is accelerated quickly to a higher speed (see figure 3). It would have been obvious at the time of the invention to modify Battistella, and include a two step spinning cycle as taught by Civanelli et al., wherein during the first step the drum is accelerated slowly while more fluid is in the clothes, in order to dry the clothes and prevent imbalance.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heckert whose telephone number is (571) 272-2702. The examiner can normally be reached on Mon. to Friday, 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH



**MICHAEL BARR**  
SUPERVISORY PATENT EXAMINER